SMALL CLAM ATTACKS YOUNG TROUT(1)

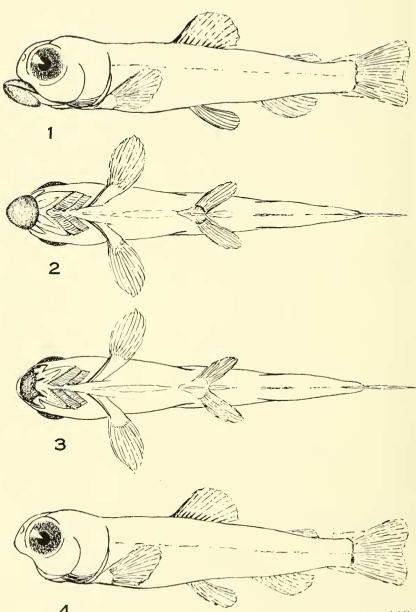
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Since we have found so little recorded information about the feeding habits of the molluscan genus *Pisidium*, it is believed that the following observations may be of interest to some biologists.

In February of this year (1954) at the White Bocks, Uinta County State Fish Hatchery more than 100 rainbow trout fry were found to have an enlargement on their lower lip which precluded their feeding. A dozen of these afflicted young trout were brought to my Ichthyology class by Richard Kay, son of Lee Kay, Editor of the Fish and Game Bulletin of the Utah Fish and Game Department. It was at once evident that the young fish, which averaged 32 mm, in length, were being attacked by one of the Sphaeriidae. An examination of the specimens revealed that adults of *Pisidium variable* Prime had attached themselves to the lower jaw of the young fishes. The illustrations, Figures 1 to 4, show how these clams were attached to the jaw of the fish and the extent to which they had eaten the tissues. Adult clams of this species are usually found in the thin mud of small ponds and streams. Evidently there was sufficient mud in the rearing troughs in which the clams could bury themselves. As the young fish came in contact with the bottom mud in feeding, the *Pisidia* fastened on to the lower lip when the mouth was open. Once attached, it was impossible for the fish to feed. The lower lip was gradually digested as shown in figures 3 and 4.

A brief report of this finding, along with a photograph of a specimen, was made by M. J. Madsen, Biologist in charge of Utah Fisheries, in the March, 1954, number of the Utah Fish and Game Bulletin. Since the photograph does not show the nature of the damage done to the tissues of the dentary and tongue by the clams, the drawings were made which clearly show the lethal attachment and effects.

Mr. Ernest J. Roscoe, a student of Utah Mollusca. examined a specimen of this clam and reported that it definitely keys to *Pisidium variabile* Prime, but that Rev. Herrington is making a study of



Figures 1 to 4 show drawings of young rainbow trout attacked by the *Pisidium variabile* Prime. Figures 3 and 4 show the extent to which the clams have digested the dentary and tongue of the young fishes. Scale 4x.

this genus and its species, which may result in a change of the name.

This brief report serves to bring to our attention what seems to be a new observation of the relationships between organisms as they struggle for an existance.